

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chun Yuan et al. Attorney Docket No: UNIV0220
Serial No: 10/804,460 Group Art Unit: 1631
Filed: March 19, 2004 Examiner: Clow, Lori A.
Confirmation No: 7265

Title: COMPUTATION OF WALL THICKNESS

FOR ELECTRONIC FILING

ELECTION TRANSMITTAL LETTER

Bellevue, Washington 98004

April 20, 2007

TO THE COMMISSIONER FOR PATENTS:

A. Election Transmittal

Transmitted herewith is an election in the above-identified patent application.

- ☒ 1. No additional claim fee is required, as shown below.
☐ 2. The claim fee has been calculated, as shown below.
☐ 3. Fees, as calculated below, in the amount of \$_____, will be charged to a credit card during electronic submission.

B. Request for Constructive Petition for Extension of Time

It is requested that any concurrent or future reply submitted in the present application requiring a petition for an extension of time under 37 CFR 1.136(a)(3) for timely submission be treated as incorporating a petition for extension of time for the appropriate length of time. It is also requested that any additional required fees under § 1.17, including all required extension of time fees, be charged to Deposit Account No. 01-1940, thereby constructively petitioning for any necessary extension of time to maintain the present application in a pending state.

<u>Computation of Fee For Claims as Amended</u>					
	<u>Claims Remaining after Amendment</u>	<u>Highest Number Previously Paid For</u>	<u>Present Extra</u>	<u>Rate</u>	<u>Additional Fee</u>
Total Claims	44	44	0	x \$25	\$0
Independent Claims	6	6	0	x \$100	\$0
ADDITIONAL CLAIM FEE					\$0
TOTAL ADDITIONAL FEE FOR THIS RESPONSE					\$ <u>0</u>

C. Additional Fee Charges or Credit for Overpayment

Please charge any additional fees or credit any overpayment to Deposit Account No. 01-1940.

Respectfully submitted,

/mike king/
Michael C. King
Registration No. 44,832

CUSTOMER NUMBER 25268

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ELECTION IN RESPONSE TO RESTRICTION REQUIREMENT

Bellevue, Washington 98004

April 20, 2007

TO THE DIRECTOR OF THE PATENT AND TRADEMARK OFFICE:

The following is in response to a Restriction Requirement mailed April 4, 2007, in regard to the above-identified patent application. The Examiner indicates that there are two groups of patentably distinct inventions defined by the claims in this application, as follows: Group I, which includes Claims 1-31 and 35-37, is directed to a method, memory medium, and system for estimating wall thickness by performing triangulation, analyzing edges, and comparing triangle edges to widths, classified in Class 382, subclass 276; and Group II, which includes Claims 32-34 and 38-44, is directed to a method, memory medium, and system for estimating wall thickness by computing tiling, edge flipping, inserting vertices, constructing an edge from the vertices, labeling edges and comparing cross edges, classified in Class 382, subclass 276.

Election:

In response to this Restriction, applicants hereby affirmatively elect the claims of Group I (i.e., Claims 1-31 and 35-37), *with traverse*, as discussed in detail below.

Traverse of the Restriction of Groups I and II:

Applicants respectfully submit that Claim 38 (which the Examiner has included in Group II) is a system including a processor configured to implement the very functions recited in Claim 1, which the Examiner has included in Group I (compare operations 1-5 from Claim 38 with steps a-e

1 from Claim 1). Thus, Claims 38-44 should be included in Group I, not Group II, and only Claims 32-
2 34 remain in Group II.

3 Furthermore, the Examiner has supported this restriction by referring to MPEP 806.05(j), and
4 articulating the reasons for concluding that the claims in Groups I and II are patently distinct from
5 each other primarily by pointing out that the different Groups comprise different operations
6 (employing a low resolution triangulation function in Group I versus computing tiling in Group II).
7 However, computing tiling is closely related to employing a low resolution triangulation function,
8 and would not appear to be a reasonable basis for restricting the claims. For example, Claim 1 of
9 Group I recites *performing a low resolution triangulation function to define triangles between the*
10 *inner contour and the outer contour* (Claim 1, subparagraph (b)). Claim 3, which depends on
11 Claim 1 and is part of Group I, further recites that the low resolution triangulation function *includes*
12 *the step of computing tiling* (Claim 3, subparagraph (c)).

13 Even more importantly, as clearly indicated in MPEP 806.05(j), distinctiveness alone is not
14 sufficient. MPEP 806.05(j) explicitly states: “...*both two-way distinctness and reasons for insisting*
15 *on restriction are necessary, i.e., separate classification, status in the art, or field of*
16 *search...(emphasis added)*” The Examiner has concluded that Groups I and II are found in identical
17 classifications, but asserts that the inventions of Groups I and II have acquired a separate status in the
18 art due to their divergent subject matter. That assertion is not supported by the evidence required
19 under the standard articulated in MPEP 808.02, which states:

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21 Where the inventions as claimed are shown to be independent or distinct under
22 the criteria of MPEP 806.05(c)-806.06, the examiner, in order to establish
23 reasons for insisting upon restriction, must explain why there would be a
24 serious burden on the examiner if restriction is not required. Thus the examiner
25 must show by appropriate explanation one of the following:

26 (A) Separate classification thereof: This shows that each invention has
27 attained recognition in the art as a separate subject for inventive effort, and
28 also a separate field of search. Patents need not be cited to show separate
29 classification.

30 (B) A separate status in the art when they are classifiable together: Even
though they are classified together, each invention can be shown to have
formed a separate subject for inventive effort when the examiner can show a
recognition of separate inventive effort by inventors. Separate status in the art
may be shown by citing patents which are evidence of such separate status, and
also of a separate field of search.

1 (C) A different field of search: Where it is necessary to search for one of
2 the inventions in a manner that is not likely to result in finding art pertinent to
3 the other invention(s) (e.g., searching different classes/subclasses or electronic
4 resources, or employing different search queries, a different field of search is
5 shown, even though the two are classified together). The indicated different
6 field of search must in fact be pertinent to the type of subject matter covered by
7 the claims. Patents need not be cited to show different fields of search.

8 ***Where, however, the classification is the same and the field of search is***
9 ***the same and there is no clear indication of separate future classification***
10 ***and field of search, no reasons exist for dividing among independent or***
11 ***related inventions.*** (Emphasis added.)

12 In the present case, (A) does not apply (the classifications are identical). With respect to (B),
13 the Examiner has not cited any patents as evidence of such separate status. With respect to (C), the
14 Examiner has not cited any evidence that it is necessary to search for one of the inventions in a
15 manner that is not likely to result in finding art pertinent to the other invention (i.e., by using
16 different search queries). Indeed, because tiling and low resolution triangulation functions are so
17 closely related (as evidenced by Claims 1 and 3, noted above) it appears reasonable to conclude that
18 the Groups are related, and that searches of either Group will turn up results relevant to both Groups.

19 Accordingly, since the classification of Groups I and II are the same, and because the field of
20 search is the same, and further, because there is no clear indication of separate future classification
21 and field of search, no reasons exist for dividing the claims as set forth in the Restriction, and the
22 Restriction should be withdrawn.

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Respectfully submitted,

/mike king/
Michael C. King
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